

BANDUNG STREET LIGHTING, WEST JAVA

1. General Information



Government Contracting Agency	: Mayor of Bandung
Implementing Unit	: Regional Road Offices (Dinas Bina Marga)
Preparation Agency	: 1. Regional Road Offices (Dinas Bina Marga) 2. LAPI ITB
Estimated Project Cost	: USD 157.00 (Scenario-1) USD 48.50 (Scenario-2) USD 30.00 (Scenario-3)
Estimated Concession Period	: 25 years
Location	: Bandung, West Java

2. The Opportunity

2.1. Project Background

Until 2015, at least there are 32.000 street lights across main streets in Bandung. As a result, it allocates numerous resources and high cost which covered by Local Government of Bandung. The Mayor of Bandung has programmed an efficient and effective street lighting system called Bandung Caana. It will reduce significant cost of operation and maintenance because of replacement from conventional lamps to LED.

2.2. Project Description

This project is planned to build at least 9600 new street lightings, new pillars and installation new cables. The new street lightings are categorized for 125 Watt, 90 Watt, 70 Watt, 50 Watt and 10 Watt.

It is planned to have three scenarios of this projects

1. Scenarios 1: Substitute old street light lamps and build new street light lamps (including pillars, LED lamps installation of new cables)
2. Scenarios 2: Substitute old street light lamps (including pillars, LED lamps installation of new cables)
3. Scenarios 3: Substitute old street light lamps (only the LED lamps, not including pillars and new cables)

2.3. Project Objectives

The development of this projects have significant impact on reducing operational and maintenance cost, reducing cost electricity and improving human safety.

3. Business Entity's Opportunity

Private partner shall be responsible to build control monitoring system, advertising, telecommunication and broadband. Moreover, they have the opportunity in leasing the lane light pole for repeater wi-fi mesh and fiber optic for internet as well as Cable TV. Both private partner and government will join the Finance-Retrofit-Transfer-Operate-Maintain (FRTOM) scheme.

4. Project Technical Specification

Lighting Pole Height (H)	
- Standard pole	10 -15 m
Average height	13 m
- Tower	20 -50 m
Average height	30 m
Interval	
- Arteri road	3.0 -3.5 m
- Collector road	3.5 -4.0 m
- Local	5.0 -6.0 m
- Minimum interval	30 m
The distance to the edge Pavement Light Pole (s1)	Minimum 0.7 m
The distance from the edge of the pavement to the point farthest illumination (s2)	Minimum L/2
Inclination angle (l)	20 -30 m

5. Environmental Impact Assessment (AMDAL) Findings

At this stage of the Pre Feasibility Study, the things that were analyzed in the study area include:

1. Identify the potential impacts in general (direct or indirect) that may be incurred as a result of the implementation of the public street lighting (PJU) project.
2. Calculating carbon emissions reductions resulting from the substitution of PJU lamp of conventional lamp types all types of LED lights are more energy efficient.
3. The activities are expected to have an impact during the construction phase is the land clearing activities (land clearing), in preparation for the installation of poles each new PJU, excavation and embankment work for PJU pile foundation and ground wires.

6. Land Acquisition and Resettlement Action Plan

PJU Project will use lanes along the road so LARAP involves excavation work need to be considered, both for civil works and electrical will have impact in traffic services reduction due to new pole and ground wires installation in arterial road, which caused some roads occupied for the activity and operational vehicle.

7. Project Structure

Estimated project cost	USD 157.00 (Scenario-1)
	USD 48.50 (Scenario-2)
	USD 30.00 (Scenario-3)
IRR	4% (Scenario-1)
	14% (Scenario-2)
	14% (Scenario-3)

8. Government Support and Government Guarantee

The project will use an Availability Payment scheme (AP), in which the entity will be concerned about the continuity of the process of payment of the AP which has been approved in a contractual agreement period despite the change of government. Therefore, the availability of government guarantees would give confidence to the business entities to invest in PJU project in the city of Bandung.

9. Project Implementation Schedule



10. Contact Information

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